To: rrobbins@note.nsf.gov

Fcc: NSF

Reply-to: (J. Lederberg) lederberg@rocky2.rockefeller.edu Subject: Monica Riley -- Fred Karp proposal DIR-9116802

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{From J. Lederberg, Rockefeller University.

I apologize for the delay; but how many people responded by 9/1 to a proposal received on 8/19?

## Anyhow:

I think the world of Monica Riley and Fred Karp (and tried to hire him to my own unit last year!) And who would want to turn down an effort to organize the literature and make it more accessible. It is also quite modest in its additional funding requirements. They certainly have more than ample technical competence to pursue this effort.

Fred has done some of the best work in program-based cognitive reasoning in molecular biology, in his Ph.D. dissertation.

But in a way, I'm sorry that this is how they want to spend their time. Much more important, in my view, would be strategies for searching the existing databases — the published literature which is becoming more and more readily available online, and if not in full text already is through abstracts, Medline etc. It is unlikely that a fixed database will ever have all the nuances of commentary that appear in connected literature, and might be found by the application (if only auxiliary) of citation indexing, etc. But we need still better semantic netting. Well, if Riley really wants to digest all that literature herself ...

A more telling point is how this will relate to the E. coli genetic database built on Barbara Bachmann's work at Yale. I don't know how satisfactory the collaboration there is with Mary Berlyn and Stan Lefkowitz. This is barely mentioned in the current proposal, and it really should be the very focus of NSF concern! And we don't need two overlapping efforts. It would be tragic for that to lapse after Barbara!! So please look into that.

I can't give you a better bottom line until that question is answered.

Joshua